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Physics Abstracts

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Science Abstracts Series A
January–June 1986

U.I.C.

Subject Index (A–L)

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The Institution of Electrical Engineers

SIX-MONTHLY INDEXES TO PHYSICS ABSTRACTS

Twice a year as part of their subscription to Physics Abstracts, subscribers receive cumulative indexes for the periods January-June and July-December. Each index is in two parts—a Subject Index, and an Author Index which comprises personal and corporate author indexes, and indexes to conferences, book titles, and bibliographies. The List of Journals and other Serial Sources abstracted by INSPEC is also included with the July-December issue of the Author Index, while the supplement to that List is included with the January-June issue.
Cumulative indexes for earlier years are also available: for details please see the inside back cover.

Subject index

The Subject index provides an alphabetical subject key to the articles included in the abstracts journal. Some general guidance on its use is given below:

1. Look in the index for the name of the specific subject in which you are interested. In most cases this name will be a heading in the index and you will find relevant articles listed under it. The majority of the subject headings fall into the following categories: property, phenomenon, substance or named objects, instrument, device, theory, method, process, application, event.

2. Occasionally you will be directed from the subject heading chosen to a different heading under which the relevant or additional articles are listed.

3. If you do not find the subject heading you first chose, try a more general heading.

4. Each entry under the heading relates to an article appearing in the abstracts journal and gives the serial number of that article in the journal preceded by the last digit of the current year, e.g. 6-12345; i.e. Abstract number 12345 in the abstracts journal for 1986.

The language of the article, if it is not English, is also indicated, e.g. light-pulse wave form monitoring with 500ps resoln. (Japanese) 6-49850.

Each entry starts with a Keyword or Keyphrase considered to be most relevant to the heading. On sorting these Keywords, the qualifying prefixes are usually ignored, (e.g. α-brass, 5-sulphosalicylic, 31 Cygni, n-Ge are sorted under brass, sulphosalicylic, Cygni, respectively).

There are three main Keyword lists: alphabetical A-Z, elementary particles, and chemical symbols (organic substances are written and not given as chemical formula). More than one Keyword list may be present under each subject heading.

For document on, say, 'photoemission of germanium' at least two access points 'photoemission' and 'germanium' are provided. Under the heading 'photoemission' the Keyword will be 'Ge' and under 'germanium' the Keyword will be 'photoemission'.

In a case like this, it is advisable and quicker to use the heading 'photoemission' and go straight to the chemical symbol list for 'Ge'.

Intermetallic compounds are indexed under the appropriate alloy headings. The chemical formula is used as Keyword. However, it is important to realise in searching the chemical symbol list that, at present, alloys and intermetallic compounds are sorted separately. For example FeCo is sorted at the end of the Fe- list e.g. Fe-Al,... Fe-Co,... Fe-Si,... Fe-Si-B,... FeCo,... FeSi and so on in this order.

PHYSICS ABSTRACTS is published twice monthly by the Institution of Electrical Engineers in association with the Institute of Electrical and Electronics Engineers Inc. 2nd Class postage paid at Piscataway, N.J. 08854, USA. POSTMASTER: Send address changes to INSPEC/IEEE SERVICE CENTER, 445 Hoes Lane, Piscataway, N.J. 08854.

Printed by Unwin Brothers Limited, The Gresham Press, Old Woking, Surrey.

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Inspec
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Physics Abstracts

Science Abstracts Series A

January – June 1986

Subject Index (A – L)

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Abbreviations and Acronyms

Abbreviations and acronyms are used in the modifiers in all INSPEC Cumulative Subject Indexes. Individual terms should be readily understood in the context of the subject headings. **Inorganic substances** are usually given by their chemical formulae. Iron and aluminium garnets appear in the formulae lists as MIG and MAG (where M is metal element, e.g. YIG and YAG); $(Pb,La)(Zr,Ti)O_3$ and $Pb(Zr,Ti)O_3$ appear as PLZT and PZT. **Organic substances** including **liquid crystals** are not given as formulae but common abbreviations are used.

1D	one-dimensional
2D	two-dimensional
3D	three-dimensional
A/D	analogue-to-digital
ABS resin	acrylonitrile-butadiene-styrene resin
AC	alternating current
ACV	air cushion vehicle
ADC	analogue-to-digital conversion
ADM	adaptive delta modulation
ADP	administrative data processing
ADPCM	adaptive differential pulse code modulation
AE	acoustic emission
AEC	atomic electron correlation(s)
AES	Auger electron spectra(oscopy)
AF	audio frequency
AFC	automatic frequency control
AFL	abstract family of languages
AFMR	antiferromagnetic resonance
AFR	away from reactor (spent fuel storage)
AGC	automatic gain control
AGR	advanced gas-cooled reactor
AGS	alternating gradient synchrotron
AGV	automatic guided vehicle
AI	artificial intelligence
ALARA	as low as reasonably achievable
ALU	arithmetic logic unit
AM	amplitude modulation or air mass number
ANOVA	analysis of variance
APACHE	Accelerator for Physics and Chemistry of Heavy Elements
APC	adaptive predictive coding
APCM	adaptive pulse code modulation
APCVD	atmospheric pressure chemical vapour deposition
APD	avalanche photodiode
APR	acoustic paramagnetic resonance
APRFR	Army Pulsed Radiation Facility Reactor
APS	appearance potential spectra(oscopy)
APW	augmented plane wave
ARMA	autoregressive moving average
ARQ	automatic repeat request
ARUPS	angular resolved ultraviolet photoelectron spectra
ASCII	American standard code for information interchange
ASK	amplitude shift keying
ATC	air traffic control
ATE	automatic test equipment
ATF	Advanced Toroidal Facility
ATM	automatic teller machine or Axilrod-Teller-Moto
ATR	attenuated total reflection
ATWS	anticipated transients without scram
AVC	automatic volume control
AWGN	additive white Gaussian noise
BARITT	barrier injection transit time
BBD	bucket-brigade device
BBEA	4-butoxybenzal-4′-ethylaniline
BBGKY	Bogoliubov-Born-Green-Kirkwood-Yvon
BCC	body centred cubic
BCD	binary-coded decimal
BCH	Bose-Chadhuri-Hocquenghem
BCS	Bardeen-Cooper-Schrieffer
BCT	body centred tetragonal
BEBC	Big European Bubble Chamber
BEM	boundary element method
BEPC	Beijing Electron Positron Collider
BER	bit error rate
BFL	buffered FET logic
BFO	beat-frequency oscillator
BH	buried heterostructure
BIL	buried injection logic
BIMOS	bipolar/metal-oxide-semiconductor
BPSK	binary phase shift keying
BRD	W Germany
BRET	Breeder Reprocessing Engineering Test
BVP	boundary value problem
BWIP	Basalt Waste Isolation Project
BWO	backward wave oscillator
BWR	boiling water reactor
BWT	backward wave tube
C-V	capacitance-voltage
C^2	command and control
C^3	command control communications or cleaved coupled cavity
C^3I	command control communications and intelligence
C^3L	complementary constant current logic
CAD	computer aided design
CADD	computer aided draughting and design
CAE	computer aided engineering
CAI	computer assisted instruction
CAM	computer aided manufacturing
CANDU	Canadian deuterium uranium
CAR	computer aided retrieval
CARS	coherent antiStokes Raman scattering (spectra)
CATT	controlled avalanche transit transistor
CATV	community antenna television or cable television
CB	citizens' band
CBI	computer based instruction
CBOOA	cyanobenzylidene octyloxyaniline
CBT	computer based training
CCBA	coupled channel Born approximation
CCFL	counter current flow limiting (LOCA phenomenon)

CCD	charge-coupled device
CCIR	International Radio Consultative Committee
CCITT	International Telephone & Telegraph Consultative Committee
CCL	capacitor-coupled logic
CCTF	Cylindrical Core Test Facility
CCTR	Culham Conceptual Tokamak Reactor
CCTV	closed circuit television
CD	compact disc
CD-ROM	compact disc ROM
CDFR	Commercial Demonstration Fast Reactor
CDI	collector diffusion isolation
CDM	code division multiplexing
CDMA	code division multiple access
CDW	charge-density wave
CECL	cascode-emitter coupled logic
CEGB	Central Electricity Generating Board
CEM	channel electron multiplier
CEPA	coupled electron pair approximation
CERN	Conseil Européen pour la Recherche Nucléaire
CESR	conduction electron spin resonance
CFG	context free grammar
CFL	context free language
CFSK	coherent frequency shift keying
CGTO	contracted Gaussian-type orbital
CHF	coupled Hartree-Fock
CI	configuration interaction
CID	charge injection device
CIDEP	chemically induced dynamical electron polarisation
CIDNP	chemically induced dynamical nuclear polarisation
CIEH	charge iterated extended Huckel
CIHY	configuration interaction Hylleras
CIM	computer integrated manufacturing or constituent interchange model
CMI	computer managed instruction
CML	current-mode logic
CMOS	complementary metal oxide semiconductor
CNC	computerised numerical control
CNDO	complete neglect of differential overlap
COC	cholesteryl oleyl carbonate
COM	computer output to microform (fiche or film)
COMFET	conductivity-modulated field effect transistor
COOB	4,4′-cyano-octyloxy-biphenyl
COVA	computer code validation
CP	charge, parity
CPA	coherent potential approximation or critical path analysis
CPFSK	continuous phase frequency shift keying
CPM	continuous phase modulation or critical path method
CPSK	coherent phase shift keying
CPT	charge, parity, time
CPU	central processing unit
CRBR	Clinch River Breeder Reactor project
CRDA	control rod drop accident
CRO	cathode ray oscilloscope
CRSR	coherent resonant Stokes rotation
CRT	cathode ray tube
CS	coupled states
CSM	continuous slowing down models
CSMA	carrier sense multiple access
CSMA/CD	carrier sense multiple access with collision detection
CSP	channel substrate planar
CSRS	coherent Stokes-Raman spectra(oscopy)
CSSB/AM	companded single sideband amplitude modulation
CT	computerised tomography
CTD	charge transfer device
CTL	complementary-transistor logic
CTR	controlled thermonuclear reactor
CVD	chemical vapour deposition
CVSDM	continuously variable slope delta modulation
CW	continuous wave
D/A	digital-to-analogue
DAC	digital-to-analogue conversion
DAD	digital audio disc
DAMA	demand assigned multiple access
DASD	direct access storage device
DBMS	database management system
DBR	distributed Bragg reflector
DBS	direct broadcasting by satellite
DC	direct current
DCFL	direct-coupled FET logic
DCLC	drift cyclotron loss cone (instability)
DCTL	direct-coupled transistor logic
DDC	direct digital control
DDL	diode-diode logic
DDR	E Germany
DECENT	distribution of exact classical energy transfer
DESY	Deutsches Electron Synchrotron
DF	Dirac-Fock
DFB	distributed feedback
DFE	decision feedback equaliser
DFT	discrete Fourier transform
DH	double heterostructure
DIL	dual-in-line
DIP	dual in-line package
DITE	Divertor in Torus Experiment
DLTS	deep level transient spectra(oscopy)
DM	delta modulation
DMA	direct memory access
DMM	digital multimeter
DMOS	double-diffused metal-oxide-semiconductor
DMSO	dimethylsulphoxide
DNA	digital network architecture or deoxyribonucleic acid
DNMR	double nuclear magnetic resonance
DOBAMBC	p-decyloxybenzylidene p′-amino 2-methyl butyl cinnamate
DoD	Department of Defense (USA)
DOPSK	differential offset phase shift keying

DORIS	Dopple-Ring-Speicher
DOS	disc operating system
DOVETT	double velocity transit time
DP	data processing
DPCM	differential pulse code modulation
DPDA	deterministic pushdown automaton
DPPH	diphenylpicrylhydrazyl
DPSK	differential phase shift keying
DQPSK	differential quadrature phase shift keying
DRAM	dynamic random access memory
DS-SSMA	direct sequence-spread spectrum multiple access
DSAM	Doppler shift attenuation method
DSB	double sideband
DSC	differential scanning calorimetry
DSI	digital speech interpolation
DSP	digital signal processor
DSS	decision support system
DTA	differential thermal analysis
DTL	diode transistor logic
DTPP	Demonstration Tokamak Power Plant
DTU	dual topological unitarisation
DV-Xα	discrete variational Xα method
DVM	digital voltmeter
DWBA	distorted wave Born approximation
DWIA	distorted wave impulse approximation
E1,E2	electric dipole, quadrupole
E^{2}PROM	electrically erasable programmable read-only-memory
EAROM	electrically alterable read-only-memory
EAS	extensive air shower
EAX	electronic automatic exchange
EB	exponential Born
EBBA	4-ethoxybenzylidene-4′n-butylaniline
EBIC	electron beam induced current(s)
EBR	experimental breeder reactor
EBT	Elmo Bumpy Torus
ECC	emergency core cooling
ECCM	electronic counter-counter measures
ECCS	emergency core cooling system
ECELR	Epithermal Critical Experiment Laboratory Reactor
ECG	electrocardiography (-gram)
ECL	emitter coupled logic
ECM	electronic countermeasures
ECRH	electron cyclotron resonance heating
EDA	ethylene diamine
EDAX	energy dispersive X-ray analysis
EDP	electronic data processing
EDTA	ethylene diamine tetra-acetic acid
EDW	electron density wave
EDX	energy dispersive X-ray
EEBAC	ethyl-4-(4′ethoxy-benzylidene-amino) cinnamate
EEG	electroencephalography (-gram)
EELS	electron energy loss spectra(oscopy)
EEPROM	electrically erasable programmable read-only-memory
EFG	edge-defined film fed growth
EFL	emitter-follower logic or emitter-function logic
EFM	extended Flygare method
EFT	electronic funds transfer
EHD	electrohydrodynamics
EHF	extremely high frequency
EHP	electron-hole potential method
EHT	extra high tension or extended Huckel theory
EHV	extra high voltage
EIRP	equivalent isotropically radiated power
ELDOR	electron electron double resonance
ELF	extremely low frequency
EM	electromagnetic
EMC	electromagnetic compatibility or European Muon Collaboration
EMF	electromotive force
EMG	electromyography (-gram)
EMI	electromagnetic interference
EMP	electromagnetic pulse
ENDOR	electron nuclear double resonance
ENG	electronic newsgathering
EOF	end of file
EPEN	empirical potential energy function based on interactions of electrons and nuclei
EPMA	electron probe microanalysis
EPR	electron paramagnetic resonance
EPRI	Electric Power Research Institute
EPROM	erasable programmable read-only-memory
ERG	electroretinography (-gram)
ESA	European Space Agency
ESCA	electron spectroscopy for chemical analysis
ESCAR	Experimental Superconducting Accelerating Ring
ESD	electrostatic discharge or electron stimulated desorption
ESF	engineered safety features
ESFI	epitaxial silicon film on insulator
ESS	electronic switching system
EUV	extreme ultraviolet
EW	electronic warfare
EX-OR	exclusive-OR (logic)
EXAFS	extended X-ray absorption fine structure
FAMOS	floating gate avalanche metal-oxide-semiconductor
FBR	fast breeder reactor
FCC	face centred cubic
FCI	fuel coolant interaction
FDM	frequency division multiplex(ing)
FDMA	frequency division multiple access
FDNC	frequency dependent negative conductance
FDNR	frequency dependent negative resistance
FECL	feedback ECL
FED	Fusion Engineering Device (USA)
FEDC	Fusion Engineering Device Centre
FEM	field emission microscopy or finite element method
FER	Fusion Experimental Reactor (Japan)

FET	field effect transistor
FFHR	fusion-fission hybrid reactor
FFT	fast Fourier transform
FFTF	Fast Flux Test Facility
FHNC	Fermi hypernetted chain
FIFO	first in first out
FIM	field ion microscopy
FIMOS	floating gate ionisation injection metal-oxide-semiconductor
FIR	far infrared or finite impulse response
FLIR	forward looking infra-red
FM	frequency modulation
FMIT	Fusion Materials Irradiation Test Facility
FMR	ferromagnetic resonance
FMS	flexible manufacturing systems
FMSR	Fast Mixed Spectrum Reactor
FPC	fusion power core
FPLA	field programmable logic array
FPT	finite perturbation theory
FRMR	field reversed mirror reactor
FSDE	fission suppressed direct enrichment (breeder blanket)
FSK	frequency-shift keying
FSGO	floating spherical Gaussian orbitals
FTR	Fast Test Reactor
FWHM	full width half maximum
GAMBIT	gate modulated bipolar transistor
GANIL	Grand Accelerateur National a Ions Lourds
GCFR	gas-cooled fast breeder reactor
GCHWR	gas cooled heavy water moderated reactor
GCM	generator coordinate method
GDR	giant dipole resonance
GETR	General Electric Test Reactor
GHF-NO-CI	generalised Hartree-Fock/natural orbital/configuration interactions
GIAO	gauge-invariant atomic orbitals
GKS	Graphical Kernel System
GMR	giant monopole resonance
GO	Gaussian orbitals
GOO	generalised Overhauser orbitals
GPED	gas phase electron diffraction
GPIB	general purpose interface bus
GPM	ground potential model
GPS	Global Positioning System
GQR	giant quadrupole resonance
GRIN	graded (gradient) refractive index
GSPC	gas scintillation proportional chamber (or counter)
GTHTGR	gas turbine HTGR
GTO	gate turn-off or Gaussian-type orbitals
GUT	grand unified theory
GVB	generalised valence bond
HAM	hydrogenic atoms in molecules
HBAB	hexyloxybenzylidene-p'-aminobenzonitrile
HBT	N-(p-hexyloxybenzylidene)-p-toluidene
HCDA	hypothetical core disruptive accident
HCP	hexagonal close packed
HDLC	high level data link control
HDTV	high definition television
HEED	high energy electron diffraction
HEMP	high altitude electromagnetic pulse
HEMT	high electron mobility transistor
HEU	highly enriched uranium (93% U235)
HEU/Th	highly enriched U/Th fuel
HEXFET	hexagonal MOSFET
HF	high frequency or Hartree-Fock
HFB	Hartree-Fock-Bogoliubov
HFEF	Hot Fuel Examination Facility
HFIR	high flux isotope reactor
HFITR	High Field Ignition Test Reactor
HFO	Hartree-Fock-Overhauser
HFS	Hartree-Fock-Slater or hyperfine structure
HGMS	high gradient magnetic separation
HIXE	heavy ion induced X-ray emission
HJBT	heterojunction bipolar transistor
HJFET	heterojunction field effect transistor
HLL	high level language
HLLW	high level liquid waste
HLW	high level waste
HMO	Huckel molecular orbitals
HMOS	high-performance metal-oxide-semiconductor
HMTSeF	hexamethylenetetraselenafulvalene (-inium)
HMTTF	hexamethyltetrathiofulvalene (-inium)
HOAB	heptyloxyazoxybenzene
HOBHA	p-n-heptyloxy-benzylidene-p-n-heptylaniline
HOMO	highest occupied molecular orbitals
HSLA	high strength low alloy (steel)
HT	high tension
HTGR	high temperature gas-cooled reactor
HTGR SC/C	HTGR steam cycle cogeneration
HV	high voltage
HVAC	heating, ventilation and air conditioning
HVDC	high voltage direct current
HVEM	high voltage electron microscopy
HWLWR	heavy water moderated light water cooled reactor
HWR	heavy water reactor
HZP	Hot Zero Power
I-V	current-voltage
I/O	input/output
I^2 L	integrated injection logic
I^3 L	isoplanar I^2 L
IAEA	International Atomic Energy Authority Agency
IAR	isobaric analogue resonance
IAS	isobaric analogue state
IBA	interacting boson approximation
IBFA	interacting boson-fermion approximation
IBM	interacting boson model
IBPBAC	isobutyl-4-(4'-phenylbenzylideneamino) cinnamate
IC	integrated circuit
ICDF	intermediate coupling Dirac-Fock

ICF	inertial confinement fusion
ICP	inductively coupled plasma
ICPP	Idaho Chemical Processing Plant
ICRF	ion cyclotron range of frequencies
ICRH	ion cyclotron resonance heating
IDT	interdigital transducer
IEPA	independent electron pair approximation
IETS	inelastic electron tunnelling spectra-(oscopy)
IF	intermediate frequency
IFA	ionisation front accelerator
IGES	initial graphics exchange specification
IGFET	insulated gate field effect transistor
IGT	insulated gate transistor
IHEP	Institute of High Energy Physics
IIR	infinite impulse response
IKBS	intelligent knowledge-based system
IKO	Institute v. Kernph Ouder Amsterdam
ILS	instrument landing system
ILW	intermediate level (radioactive) waste
IMPATT	impact avalanche transit time
INDO	intermediate neglect of differential overlap
INDOR	internuclear double resonance
INEPT	insensitive nuclei enhanced by polarisation transfer
ING	intense neutron generator
INO	iterative natural orbital
INS	Information Network System or inertial navigation system
INTELSAT	international telecommunications satellite consortium
INTOR	International Tokamak Reactor
IOC-ω	inclusion of the overlap charges in the omega
IPSS	international PSS
IR	infrared
IRDO	intermediate retention of differential overlap
IREB	intense relativistic electron beam
IRED	infrared emitting diode
IRS	information retrieval system
ISABELLE	intersecting storage and acceleration
ISDN	integrated services digital network
ISFET	ion-sensitive field effect transistor
ISI	intersymbol interference
ISL	integrated Schottky logic
ISO	International Standards Organization
ISR	intersecting storage ring
ISX	impurity study experiment
IT	information technology
ITC	ionic themocurrents
ITEP	Institute of Theoretical and Experimental Physics
ITR	Ignition Test Reactor
IU	Indiana University
IVO	improved virtual orbitals
JAERI	Japan Atomic Energy Research Institute
JET	Joint European Torus
JFET	junction field effect transistor
JINR	Joint Institute for Nuclear Research
JT-60	Japanese Tokamak-60
KdV	Korteweg-de Vries
KEK	Japan National Laboratory for High Energy Physics
KKR	Korringa-Kohn-Rostoker
LAMPF	Los Alamos Meson Physics Facility
LAN	local area network
LC	inductance-capacitance
LCAO	linear combination of atomic orbitals
LCBO	linear combinations of (semi-localised) band orbitals
LCD	liquid crystal display/device
LCGO	linear combination of Gaussian orbitals
LCP	Large Coil Program
LCRO	linear combination of Rydberg orbitals
LCTF	Large Coil Test Facility
LDD	lightly doped drain
LDPE	low density polyethylene
LEAR	Low Energy Antiproton Ring
LEC	liquid encapsulated Czochralski
LED	light emitting diode
LEED	low energy electron diffraction
LEFD	Large Experimental Fusion Device
LEP	Large Electron Positron (CERN)
LET	linear energy transfer
LEU	low enrichment uranium (10% U235)
LEU/Th	low enrichment U/Th fuel
LF	low frequency
LHRH	lower hybrid resonance heating
LIFO	last in first out
LIME	laser induced magnetically enhanced
LLTR	Large Leak Test Rig
LLW	low level (radioactive) waste
LMC	Large Magellanic Cloud
LMFBR	liquid metal fast breeder reactor
LMS	least mean square
LMTO	linear combination of muffin tin orbitals
LNG	liquified natural gas
LOCA	loss of coolant accident
LOCE	loss of coolant experiment
LOCOS	local oxidation of silicon
LOF	loss of flow
LOFT	Loss of Flow Test Facility
LOFW	loss of feed water
LP	linear programming
LPC	linear predictive coding
LPCVD	low pressure chemical vapour deposition
LPE	liquid phase epitaxy
LPFL	low pinchoff-voltage FET logic
LSA	limited space charge accumulation
LSD	local spin density or loop shut-down
LSI	large-scale integration
LSPB	Large Scale Prototype Breeder
LSTF	Large Scale Test Facility
LTE	local thermodynamic equilibrium
LUMO	lowest unoccupied molecular orbitals
LV	low voltage

LWBR	light water breeder reactor
LWHCR	light water high convertor reactor
LWR	light water reactor
M1,M2	magnetic dipole, quadrupole
MADO	Mulliken approximation for differential overlap
MARS	Mirror Advanced Reactor Study
MBBA	4-methoxybenzylidene-4′-n-butylaniline
MBE	molecular beam epitaxy
MBPT	many body perturbation theory
MCD	magnetic circular dichroism
MCFR	magnetic confinement fusion reactor
MCP	microchannel plate
MCPESCF	multiconfiguration paired excitation SCF
MCSCF	multiconfiguration self-consistent field
MCVD	modified chemical vapour deposition
MCXα	multiconfiguration Xα
MCZDO	multi-centre zero differential overlap
MEC	molecular electron correlation(s)
MEDO	multipole expansion of diatomic overlap
MESFET	metal-semiconductor field effect transistor
MEU	medium enrichment uranium (20% U235)
MEU/Th	medium enrichment U/Th fuel
MF	medium frequency
MFP	mean free path
MFR	mirror fusion reactor
MFSK	multiple frequency shift keying
MFTF	Mirror Fusion Test Facility
MHD	magnetohydrodynamics
MIC	microwave integrated circuit
MID	magnetically insulated diode
MIDP	microwave induced delayed phosphorescence
MIEHM	modified iterative extended Huckel method
MIM	metal-insulator-metal
MIMD	multiple input multiple data
MINDO	modified incomplete neglect of differential overlap
MIS	metal-insulator-semiconductor or management information system
MISFET	metal-insulator-semiconductor field effect transistor
MIT	Massachusetts Institute of Technology
MITATT	mixed tunnelling avalanche transit time
MLC	multilayer ceramic
MLS	microwave landing system
MLW	medium level (radioactive) waste
MM	millimetre
MMF	magnetomotive force
MMI	man machine interface
MMIC	monolithic microwave integrated circuit
MNOS	metal-nitride-oxide-semiconductor
MO	molecular orbitals
MOCIC	molecular orbital constraint of interaction coordinates
MOCVD	metal-organic chemical vapour deposition
MODFET	modulation doped field effect transistor
MODPOT	model potential
MOS	metal-oxide-semiconductor
MOSFET	metal-oxide-semiconductor field effect transistor
MOST	metal-oxide-semiconductor transistor
MOVPE	metal-organic vapour phase epitaxy
MOX	mixed oxide fuel
MPH	moving plasmoid heater
MPSK	multiple phase shift keying
MQORC	modified quadrature overlapped raised cosine
MQW	multiple quantum well
MRAC	model reference adaptive control
MRD	multi-reference double excitation
MRINDO	modified Rydberg INDO
MRP	materials requirements planning
MRP II	manufacturing resources planning
MS	management science
MSI	medium scale integration
MSK	minimum shift keying
MSR	molten salt reactor
MSSW	magnetostatic surface wave
MSU	Michigan State University
MSW	magnetostatic waves
MSXα	multiple scattering X alpha
MTBF	mean-time between failures
MTF	modulation transfer function
MTI	moving target indicator
MTL	merged-transistor logic
MTTF	mean time to failure
MTXα	muffin-tin Xα
MUF	material unaccounted for or maximum usable frequency
MWPC	multiwire proportional chamber
NAL	National Accelerator Laboratory
NAND	not-and(logic)
NBETF	Neutral Beam Engineering Test Facility
NBI	neutral beam injection
NBPS	neutral beam power systems
NBS	National Bureau of Standards
NC	numerical control
NCBR	nitrine cooled breeder reactor
NCMET	non-closed shell many electron theory
NDDO	neglect of diatomic differential overlap
NDE	nondestructive evaluation
NDRO	nondestructive readout
NDT	nondestructive testing
NEA	negative electron affinity
NEMO	non-empirical molecular orbitals
NET	Next European Tokamak
NEVE	non-empirical valence-electron
NHS	National Health Service
NIC	negative impedance convertor

NMOS	N-channel metal-oxide-semiconductor
NMR	nuclear magnetic resonance
NMR-ON	NMR on oriented nuclei
NNNDO	neglect of non-neighbour differential overlap
NOR	not-or(logic)
NPL	National Physical Laboratory
NQR	nuclear quadrupole resonance
NRC	Nuclear Regulatory Commission
NRM	natural remanent magnetisation
NSRR	Nuclear Safety Research Reactor
NSSS	nuclear steam supply system
NTL	nonthreshold logic
NTO	natural transition orbitals
NTSC	National TV Standards Committee
NWPA	Nuclear Waste Policy Act
OA	office automation
OCR	optical character recognition
ODE	ordinary differential equation
ODMR	optical detection of magnetic resonance
OEIC	optoelectronic integrated circuit
OEM	original equipment manufacture
OER	oxygen enhancement ratio
OH	ohmic heating
OHTE	Ohmically Heated Toroidal Experiment
OPHF	orbital polarised Hartree-Fock
OPW	orthogonal plane wave
OQPSK	offset quadrature phase shift keying
OR	operations research
ORELA	Oak Ridge Electron Linear Accelerator
ORNL	Oak Ridge National Laboratory
OS	operating system
OSI	open systems interconnection
OTDR	optical time domain reflectometry
OTEC	ocean thermal energy conversion
OTF	optical transfer function
OTS	Orbital Test Satellite
OTSG	once through steam generator
OZI	Okubo-Zweig-Iizuha (quark model)
PAA	paraazoxyanisole
PABX	private automatic branch exchange
PAC	perturbed angular correlation
PAHR	post accident heat removal
PAL	programmable array logic
PAM	pulse amplitude modulation
PAP	paraazoxyphenetole
PBF	power bursts facility
PBFA	Particle Beam Fusion Accelerator
PBR	pebble bed reactor
PBT	permeable base transistor
PBX	private branch exchange
PC	printed circuit or personal computer or programmable controller
PCAC	partially conserved axial currents
PCB	printed circuit board
PCES	phase change energy storage
PCGVB	pairwise correlated generalised valence bond

PCILOCC	perturbative configuration interaction using localised orbitals for crystal calculation
PCM	pulse code modulation
PCRV	prestressed concrete reactor vessel
PCV	primary containment vessel
PCX	plasma confinement experiment
PDE	partial differential equation
PDX	Poloidal Divertor Experiment
PEM	photoelectromagnetic
PEP	Positron Electron Proton (Stanford)
PET	polyethylene terephthalate
PETRA	Positron Electron Tandem Ringbeschleuniger Anlage
PF	poloidal field or power factor
PFM	pulse frequency modulation
PFR	Prototype Fast Reactor
PHWR	pressurised heavy water reactor
PID(PI,PD)	proportional+integral+differential (derivative)
PIPECO	photoion photoelectron coincidence
PIUS	process inherent ultimately safe
PIXE	proton induced X-ray emission
PLA	phase locked arrays or programmable logic array
PLBR	Prototype Large Breeder Reactor
PLC	programmable logic control
PLL	phase locked loops
PLT	Princeton Large Torus
PM	pulse modulation or phase modulation
PMMA	polymethylmethacrylate
PMDR	phosphorescence microwave double resonance
PMOS	P-channel metal-oxide-semiconductor
PMR	proton magnetic resonance
PNDO	partial neglect of differential overlap
PNO-CI	pair natural orbital configuration interaction
PNS	Pulsed Neutron Source
POL	pair orthogonalised Lowdin
POPAE	protons on protons and electrons
POPOP	phenyl-oxazolyl-phenyl-oxazolyl-phenyl
PORV	power operated relief valve
POS	point of sale
PPDP/S	Pariser-Parr-Del Bene-Pople/Segal calculations
PPI	plan position indicator
PPM	pulse position modulation or parts per million
PPP	Pariser-Parr-Pople
PRA	probabilistic risk assessment
PRDDO	partial retention of diatomic differential overlap
PREPP	Process Experimental Pilot Plant
PRF	pulse recurrence (repetition) frequency
PROM	programmable read-only-memory or Pockels readout optical modulator
PS	proton synchrotron (CERN)
PSD	power shut-down or power spectral density

PSDN	packet switched data network
PSK	phase shift keying
PSS	packet switching service or Packet SwitchStream
PSTN	public switched telephone network
PSU	power supply unit
PTFE	polytetrafluoroethylene
PTM	pulse time modulation
PVC	polyvinyl chloride
PVD	physical vapour deposition
PWA	partial wave analysis
PWB	printed wiring board
PWBA	plane wave Born approximation
PWIA	plane wave impulse approximation
PWM	pulse width modulation
PWR	pressurised water reactor
QA	quality assurance
QAM	quadrature amplitude modulation
QASK	quadrature amplitude shift keying
QC	quality control
QCD	quantum chromodynamics
QDMBPT	quasi-degenerate many-body perturbation theory
QED	quantum electrodynamics
QFSK	quadrature frequency shift keying
QORC	quadrature overlapped raised cosine
QOSRC	quadrature overlapped squared raised cosine
QPM	quark-parton model
QPR	quadrature partial response
QPSK	quaternary phase shift keying
R & D	research and development
RAD	ribbon-against-drop
RAM	random access memory
RBE	relative biological effectiveness
RBS	Rutherford backscattering
RC	resistance-capacitance
RCIC	reactor core isolation cooling
RCNDO	Rydberg CNDO
RCS	rapid cycling synchrotron or reactor coolant systems
RCTL	resistor-capacitor-transistor logic
REA	rod ejection accident
RF	radio frequency
RFI	radio frequency interference
RFPR	reversed field pinch reactor
RFX	Reversed Field (Pinch) Experiment
RG	renormalisation group
RGB	red green blue
RHEED	reflection high energy electron diffraction
RHF	restricted Hartree-Fock
RIA	reactivity initiated accident
RIE	reactive ion etching
RINDO	Rydberg INDO
RISC	reduced instruction set computer
RKKY	Rudermann-Kittel-Kasuya-Yosida
RLC	resistance-inductance-capacitance
RMS	root-mean-square
RNA	ribonucleic acid
ROM	read-only memory
RPA	random phase approximation
RPAE	random phase approximation with exchange
RPM	relaxation potential model or revolutions per minute
RPV	reactor pressure vessel
RTG	radioisotope thermoelectric generators
RTL	resistor-transistor logic
RTTY	radio teletypewriter
S/N	signal-to-noise
SACCI	symmetry adapted cluster configuration interaction
SAINT	self-aligned implantation for N^+-layer technology
SAMO	simulated ab initio molecular orbitals
SAMOS	stacked gate avalanche injection metal-oxide-semiconductor
SAN	small area network
SAR	synthetic aperture radar
SAW	surface acoustic waves
SAXS	small-angle X-ray scattering
SCC	stress corrosion cracking
SCF	self-consistent field
SCFL	source-coupled FET logic
SCH	separate confinement heterostructure
SCL	space charge limited
SCPC	single channel per carrier
SCPT	self-consistent perturbation theory
SCR	silicon controlled rectifier
SCTF	Slab Core Test Facility
SDFL	Schottky-diode FET logic
SDLC	synchronous data link control
SDM	space division multiplexing
SDMA	space division multiple access
SDO	shielded diatomic orbitals
SED	stochastic electrodynamics
SEHF	spin extended Hartree-Fock
SEM	scanning electron microscopy
SERS	surface enhanced Raman scattering
SEXAFS	surface extended X-ray absorption fine structure
SFE	solar-flare effect
SFL	substrate fed logic
SGEMP	system generated electromagnetic pulse
SGHWR	steam generating heavy water reactor
SHF	superhigh frequency
SHG	second harmonic generation
SICOS	sidewall base contact structure
SIL	single-in-line
SIMD	single instruction multiple data
SIMOS	stacked-gate injection metal-oxide-semiconductor
SIMOX	separation by implantation of oxygen
SIMS	secondary ion mass spectra(oscopy)
SIN	Swiss Institute of Nuclear Research
SINDO	scaled INDO
SIPOS	semi-insulating polycrystalline silicon
SIS	semiconductor-insulator-semiconductor
SISAM	spectrometer with interference selective amplitude modulation

SIT	static induction transistor
SLC	Stanford Linear Collider
SLIC	subscriber line interface circuit
SLSF	Sodium Loop Safety Facility
SMA	surface mount(ed) assembly
SMC	Small Magellanic Cloud or surface mount(ed) component
SMD	surface mount(ed) device
SMES	superconductive magnetic energy storage
SMQORC	staggered modified quadrature overlapped raised cosine
SMT	surface mount(ed) technology
SNA	Systems Network Architecture
SNM	special nuclear material
SNR	signal to noise ratio or supernova remnant
SNS	superconducting normal superconducting or Spallation Neutron Source
SOG	strongly orthogonal geminal
SOI	silicon on insulator
SOS	silicon on sapphire
SPA	separated pair approximation
SPC	stored program control
SPCP	single parity check product (code)
SPEAR	Stanford Positron Electron Asymmetric Ring
SPHF	spin polarised Hartree-Fock
SPS	Super Proton Synchrotron (CERN)
SQAM	superposed quadrature amplitude modulation
SQPR	staggered quadrature partial response
SQPSK	staggered quadrature phase shift keying
SQUID	superconducting quantum interference device
SRAM	static random access memory
SREMP	source region electromagnetic pulse
SRMCASE	symmetry-restricted-multiconfiguration annihilation of single excitations
SRV	safety release valve
SS-TDMA	satellite switched time division multiple access
SSB	single sideband
SSBW	surface skimming bulk wave
SSC	sudden storm commencement or Superconducting Super Collider
SSCR	spectrum shift controlled reactor
SSFL	Schottky-barrier coupled Schottky-barrier gate FET logic
SSI	small scale integration
SSMA	spread spectrum multiple access
SST	supersonic transport
STD	salinity-temperature-depth or subscriber trunk dialling
STEC	solar thermal energy conversion
STEM	scanning transmission electron microscopy
STL	Schottky transistor logic
STO	Slater-type orbitals
STOL	short take-off and landing
STP	Slater-transfer Preuss

SURMAC	surface magnetic confinement
SUSY GUT	supersymmetric grand unified theory
SW	short wave
SWEPP	Stored Waste Examination Pilot Plant
SWR	sodium water reactor or standing wave ratio
SXAPS	soft X-ray appearance potential spectra(oscopy)
TAB	tape automated bonding
TASI	time assignment speech interpolation
TAT	transatlantic telephone cable
TBBA	terephthal-butylaniline
TCNE	tetracyanoethylene
TCNQ	tetracyanoquinodimethane
TCR	temperature coefficient of resistance
TCXO	temperature compensated crystal oscillator
TDHF	time-dependent Hartree-Fock
TDF	Technology Demonstration Facility or transborder data flow
TDM	time division multiplex(ing)
TDMA	time division multiple access
TDMF	time dependent mean field theory
TDPAC	time differential perturbed angular correlation
TDS	thermal desorption spectra(oscopy)
TE	transverse electric
TEA	transversely excited atmosphere
TEGFET	two-dimensional electron gas field effect transistor
TEM	transverse electromagnetic or transmission electron microscopy
TEXT	Texas Experimental Tokamak
TF	toroidal field
TFCX	Toroidal Fusion Core Experiment
TFT	thin film transistor
TFTR	Tokamak Fusion Test Reactor
TGA	thermogravimetric analysis
TGFB	triglycine fluoroberyllate
TGS	triglycine sulphate
TGSe	triglycine selenate
THORS	Thermal-Hydraulic Out-of-Reactor Safety Facility
THTF	Thermal Hydraulic Test Facility
TJS	transverse junction stripe
TLD	thermoluminescent dosimeter(-ry)
TM	transverse magnetic
TMC	Test Module Coil
TMHR	tandem mirror hybrid reactor
TMI	Three Mile Island
TMMC	tetramethylammonium manganese chloride
TMR	tandem mirror reactor
TMTSeF	tetramethyltetraselenafulvalene (-inium)
TMTTF	tetramethyltetrathiofulvalene(-inium)
TMX-U	Tandem Mirror Experiment-Upgrade
TNS	The Next Step
TOF	time-of-flight
TOP	transient overpower accident
TPC	time projection chamber
TPD	temperature programmed desorption
TPTF	Two-Phase Flow Test Facility

TRAPATT	trapped plasma avalanche triggered transit
TREAT	Transient Reactor Test Facility
TRM	thermoremanent magnetisation
TRRR (TR^3)	time resolved resonant Raman (spectra (-oscopy))
TRU	transuranic (waste)
TSC	thermally stimulated currents
TSD	thermally stimulated desorption
TSEE	thermally stimulated exo-electron emission
TSIC	thermally stimulated ionic currents
TSTA	Tritium Systems Test Facility
TSeF	tetraselenafulvalene(-inium)
TSeT	tetraselenatetracene
TTF	tetrathiofulvalene(-inium)
TTL	transistor transistor logic
TTMP	transit time magnetic pumping
TTT	tetrathiotetracene
TUCA	transient undercooling accident
TUCOP	transient undercooled overpower accident
TV	television
TVRO	TV receive only
TW	travelling wave
TWT	travelling wave tube
UART	universal asynchronous receiver transmitter
UCHF	uncoupled Hartree-Fock
UCN	ultra cold neutrons
UHF	ultra high frequency or unrestricted Hartree-Fock
UHPS	underground hydroelectric pumped storage
UHV	ultra high voltage
UJT	unijunction transistor
UKAEA	United Kingdom Atomic Energy Authority
ULA	uncommitted logic array
ULF	ultra low frequency
ULSI	ultra-large scale integration
UMD	unitised microwave devices
UPS	ultraviolet photoelectron spectra(oscopy) or uninterruptible power supply
US	ultrasonic
USART	universal synchronous/asynchronous receiver transmitter
UUT	unit under test
UV	ultraviolet
VAD	vapour phase axial deposition
VAN(S)	value added network (services)
VB	valence bond
VCO	voltage controlled oscillator
VCR	video cassette recorder
VDM	vector dominance model
VDT	visual display terminal
VDU	visual display unit
VDW	van der Waals
VFO	variable frequency oscillator
VHF	very high frequency
VHSIC	very high speed integrated circuit
VJFET	vertical junction field effect transistor
VLBI	very long base line interferometry
VLF	very low frequency
VLSI	very large scale integration
VM	virtual machine
VMOS	vertical channel metal-oxide-semiconductor
VOR	VHF omnidirectional range
VPE	vapour phase epitaxy
VRC	visual record computer
VRDDO	variable retention of diatomic differential
VS	virtual storage
VSB	vestigial sideband
VSEPR	valence shell electron pair repulsion
VSWR	voltage standing wave ratio
VTOL	vertical take-off and landing
VTR	voltage transformation ratio or video tape recorder
VUV	vacuum ultraviolet
VVER	water moderated water cooled reactors
VVVF	variable voltage variable frequency
WAN	wide area network
WARC	World Administrative Radio Conference
WAXS	wide-angle X-ray scattering
WDM	wavelength division multiplex(ing)
WIPP	Waste Isolation Pilot Plant
WKB	Wentzel-Kramers-Brillouin
WP	word processing
WWER	water moderated water cooled reactors
XANES	X-ray absorption near edge structure
XLPE	cross-linked polyethylene
XOR	exclusive-OR
XPD	cross-polarisation discrimination
XPS	X-ray photoelectron spectra(oscopy)
XUV	X-ray-ultraviolet
ZEBRA	Zero Energy Breeder Reactor Assembly
ZGS	zero gradient synchrotron
ZPPR	zero power plutonium reactor
ZTP	Z toroidal pinch

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AFC *see automatic frequency control*

AFMR *see antiferromagnetic resonance*

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AGC *see automatic gain control*

age (Earth) *see geochronology*

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APS *see appearance potential spectra; appearance potential spectroscopy*
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CCTV *see closed circuit television*

CDW *see charge density waves*

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EEG *see electroencephalography*

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see also ferrites; iron alloys

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lawrencium
- No entries

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LSA *see limited space charge accumulation*

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